

A close-up photograph of a cotton plant with several large, fluffy white cotton bolls. The background shows a vast field of similar cotton plants under a clear blue sky.

Traceability Solutions for Cotton Supply Chains

FDRA Sourcing and Supply
Chain Summit
July 20, 2022

Sandeep Khatua



Add value.
Inspire trust.

UFLPA Impact on Global Supply Chains

- **The Uyghur Forced Labor Prevention Act (UFLPA) Enters into Force on June 21, 2022**

- **What is it?**

- On December 23, 2021, President Biden signed into UFLPA law to prevent goods made with forced labor in the Xinjiang Uyghur Autonomous Region (XUAR) of China from entering the U.S. market.

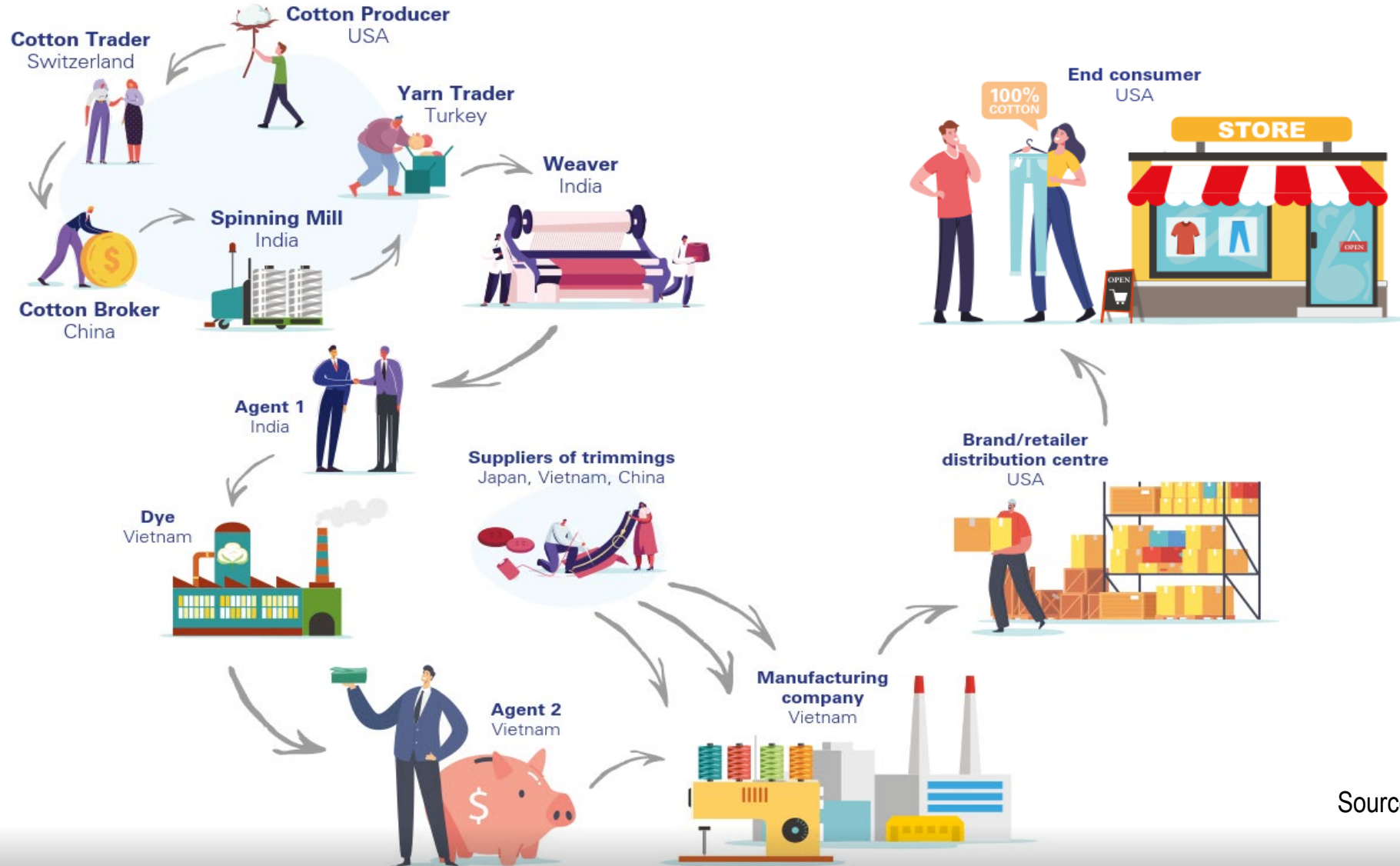
- **Impact of the UFLPA on U.S. Imports**

- Footwear, apparel, and textile supply chains will be subjected to unprecedented levels of scrutiny.
- companies wishing to import goods produced in Xinjiang into the USA must provide clear and convincing evidence that the goods were not manufactured with forced labor
- Under the Act, the United States Customs and Border Protection (CBP) is entitled to detain, exclude or seize and forfeit shipments

- **Other important matters**

- CBP budget doubles – more detentions at the border
- Lack of supply chain visibility by brands will contribute to the issue – Traceability is Key

Footwear and Apparel Supply Chain is Complex ...



Source: KPMG analysis

Solution

Service Offering

- TUV SUD Cotton Traceability management program and
- Applied DNA Sciences - CertainT® Assurance




CertainT for Textile Assurance
Traceability. Transparency. Trust.

What can importers do?

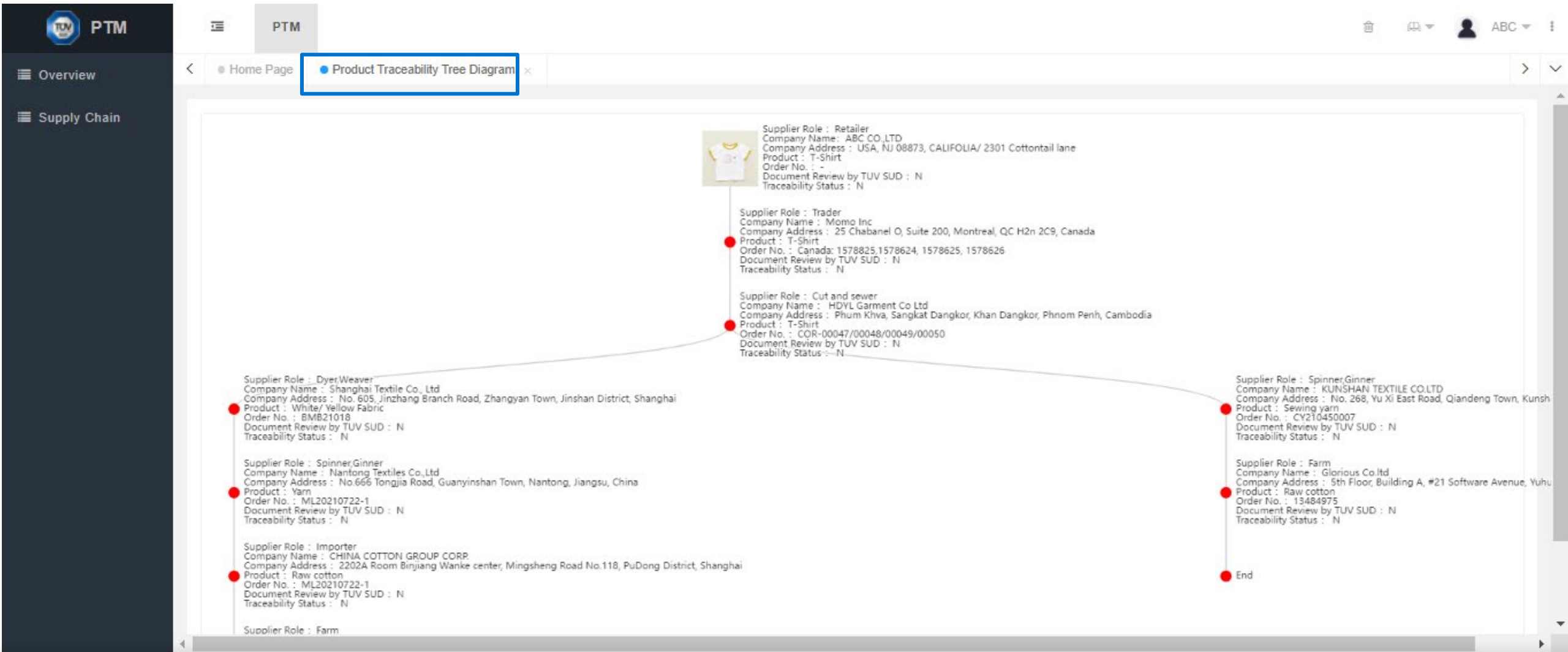
Prepare. Plan. Be Proactive.

- Establish/maintain a due diligence program
- Carefully assess Xinjiang Uyghur Autonomous Region and related supply chain risks
- Mitigate exposure to forced labor risks
- Be prepared to demonstrate compliance with the enforcement strategy's due diligence, supply chain mapping, and tracking, and supply chain management measures
- Be prepared to respond to CBP inquiries and to demonstrate that goods are not mined, produced, or manufactured wholly or in part with forced labor

TUV SUD's Product Traceability Management (PTM) Platform

- 
- **The TÜV SÜD product traceability management platform helps to**
 - Simplify supply chain into tier 1 to tier N supplier to submit their own transaction records only.
 - Generate a simplified supply chain map
 - Implement supply chain privacy protection
 - Smart E-mail reminder to assist suppliers to complete traceability
 - Collaborate with the third party to conduct document review and ensure fact-based supply chain traceability

Enhance Your Supply Chain Traceability Status with PTM



DNA Traceability + Isotope Testing with Applied DNA Sciences

Textile World

Breaking News

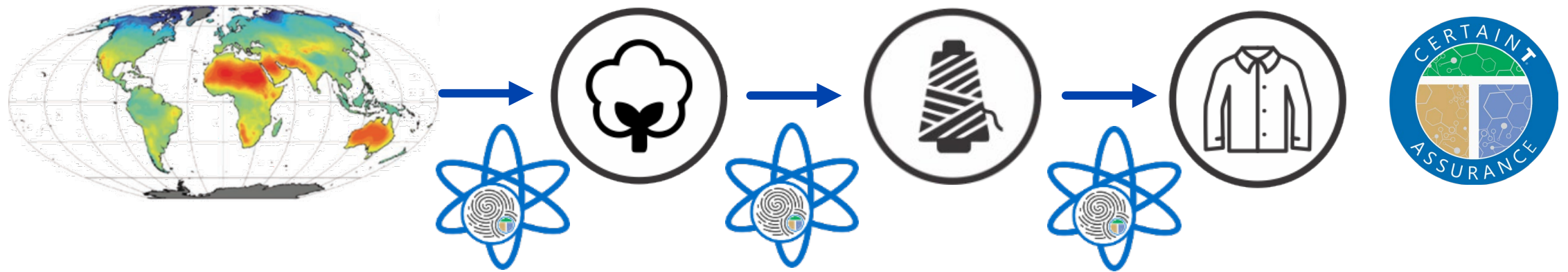
Government/Trade

U.S. Government Guidance Permits DNA Traceability And Isotopic Testing As Evidence Under Uyghur Forced Labor Prevention Act

June 21, 2022

STONY BROOK, N.Y — June 21, 2022 — Applied DNA Sciences, Inc. (the “Company”), a leader in cell-free, enzymatic DNA production, has been increasing its engagement with all stakeholders in anticipation of the June 21, 2022, effective date of the “rebuttable presumption” standard under the Uyghur Forced Labor Prevention Act (UFLPA) signed into

Where does my cotton come from?



Carbon, Hydrogen, Oxygen

Identify a Unique "Fingerprint" in Cotton Fiber

Verified in Yarn + Fabric + Finished Goods

Your Cotton – Your Supply Chain

Secure Cotton Supply Chain with DNA & Isotope Testing



Baled Fiber



Fiber to Yarn at Spinner



Yarn to Fabric Weaver/Knitter



Fabric to Finished Goods

Customer Sample Submittal Reference Information	
Sample ID	Prod. Type
Color	Style
Country of Origin	Manufacturer
Lot No.	Contract
Commodity	Customer Ref. No.
Authentication Results:	
Customer	Contract/Order Ref. Confirms
Manufacturer	Contract
Color	Authentication Specification
Style	Contract/Order Ref. Confirms
Contract	Authentication Specification
Additional Comments:	
Additional Comments from Sample Submission Form:	
This analysis and confirmed by TUV SUD, Ltd. (TUV SUD) business analysis.	
Sample Picture:	
Approved Signatures:	
Tested By:	Date:
Reviewed By:	Date:
Quality Review:	Date:

Know Your Cotton



**TUV for Audit, Inspection,
Supply Chain Mapping**



**Cotton testing by Applied DNA
+ PCR analysis
+ Isotope analysis**



**Data-driven
Pre-shipment data
Verified by CertainT[®]**

